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ALUMNI PREPARING FOR A SUPREME EFFORT

Campaign for great Alumni Fund to be begun very soon—A world-wide Organization

As announced by President Maclaurin at the annual meeting of the Alumni Association in January, a committee of six has been appointed by the Alumni Council, to take charge of the raising of an Alumni Fund to be used in building the New Technology.

The members of the committee are as follows: Everett Morss, '85, chairman; James W. Rollins, '78, Edwin S. Webster, '88, Arthur T. Bradlee, '88, Frederic H. Fay, '93, I. W. Litchfield, '85, secretary.

This committee has been assiduously at work since its appointment, and is making plans for the campaign and drafting an organization covering the entire country. The Alumni Fund Committee will consist of the central committee named above, the chairmen of class committees, and the chairmen of geographic committees. These chairmen have been carefully chosen with a view to their efficiency, and with the exception of a very few localities, the entire organization is complete.

A plan of procedure has been definitely laid out, and an appeal will be sent out by the central committee in a very short time. It is the intention to apply the

scientific method to this enterprise, and as it is well understood by former students of the Institute that the fund is to be raised, and as its purpose is known and appreciated, it seems likely that the pledges will be filled and returned within a few days of their receipt. No man should have great difficulty in determining how much he will give. The amount needed for buildings alone is \$3,000,000, and a large part of this must come from the former students of the Institute. Just how much the fund will total remains with the donors themselves.

Alumni of other colleges have either recently completed funds, or are now engaged in collecting them. The alumni of Brown have pledges for \$750,000, and expect to make it an even \$1,000,000 before the first of June. The alumni of Technology have their record to make, and as this enterprise is one in which every Tech man is interested, it is also one in which every Tech man should be represented. No call will be made for payment on pledges before the first of October, 1912.

One very important argument in favor of speedily completing this fund, is the fact that the Institute must know how

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much money it can count on before it can go very deep into building operations. The response of the alumni will be very largely indicative of the attitude of the general public, and its influence on gifts from persons outside of the Institute will be very great.

The very location of the new group of buildings places an obligation on us that we cannot shake if we would, and the amount of money raised will absolutely determine whether or not our whole duty has been performed. The plans contemplated for developing the tract cannot fail to produce satisfactory results. Doctor Maclaurin's views as to the character of the buildings are well known, and heartily approved. At the Alumni Banquet in January, he said:

"The proper solution of this great problem needs money and brains; it is a large problem involving many subsidiary questions before the whole can be successfully carried to a conclusion. There is what may be called the *engineering* question, what is the proper relation of the different buildings to one another to give the maximum of convenience at the minimum of cost; what is the right size and the right disposition of rooms within each building, and what is the arrangement that best permits of expansion to meet the needs of the future,—needs that at best can only be guessed at? Then there is the *social* question, one of the most important and one that has been answered less satisfactorily in the past than any of the other great questions with which Technology has been confronted. Some provision must be made to facilitate a healthy social activity amongst the students, and no one familiar with the influence of the fraternities in our midst can doubt for a moment that such social activity will make for good amongst us. We must have student houses and we must also have as the common center a Walker Memorial in every way worthy of that great humanist. Last, but by no means least, there is the *architectural* question. If we do not rise to the level of this great

question we will commit a crime against Technology students for generations to come and a crime against the whole community in which they live and move. Ours is a unique opportunity and unique responsibility. We are building, if not for all time, at least for a time that must seem long in the life of any individual. The Institute itself will never die, and for many a generation it must carry in its outward form the impress that we put upon it now. What is that impress to be? Will it adequately express the ideals of the Institute, the nobility of its purpose and the dignity of its work? Will those ideals be presented as impressively and as beautifully as by the towers and spires and other architectural features characteristic of the great churches of the Middle Ages? If they do not, it will be a permanent slur on our intelligence and on our taste, for the ideal of education for which the Institute stands is as noble an ideal as any that can be expressed by form, and it is pre-eminently *the* ideal of the thoughtful section of the American people today."

Plans for the future are being prosecuted as vigorously as is possible at the present time. It is evident, however, from what the President has said, that the matter will be considered with the deliberation devolving upon an institution that is planning for two generations to come. It would not be at all difficult to estimate the amount of space needed, and to lay out a handsome group of typical college buildings. The committee proposes to go much deeper than this, and to produce edifices as fully adapted to the business of educating students and pursuing research work as the best modern factories are adapted to the production of manufactured material.

As President Maclaurin has pointed out, this investigation will require considerable time, but four months will be better than two, and eight months better than four. It seems reasonable to believe, however, that the architects will be in possession of the general scheme before the year has passed by.

ANNUAL BANQUET OF NORTHWESTERN ASSOCIATION

Old-time celebration in Chicago with President Maclaurin as guest—Strong appeal for large Alumni Fund

Although the banquet of the Northwestern Association was held several weeks ago, there are still echoes of lusty Technology cheers reverberating in the corners of the University Club. There is something about the Technology cheer that will not brook even the physical laws of interference or resistance, and there was certainly enough fervor expended in this direction when the President arose to address the Northwestern Association to insure that a small remaining echo at least, should mingle with the fresh shouts of the next anniversary. Arrangements for the banquet were as complete in every small detail as these affairs always are, special emphasis being laid on the "Symphony Chorus" whose vociferous vocalizations interfered with the signals of the locomotives of the Illinois Central Railroad, and changed the permanent set on the facial expression of the gargoyles that looked down from above.

It was a real college dinner bubbling over with good feeling and enthusiasm, and underlying it all, was a strong feeling of gratitude to President Maclaurin, through whose instrumentality the new era of prosperity has been brought about. The President's address was a serious and thoughtful one and it was followed with eager interest by his auditors, many of whom were not aware of the fact that the Institute had received during the year of 1911, the equivalent of a larger sum than had come to any other educational institution in the country. The President made the particular point that Technology is a national institution; about one half of its students come from beyond the confines of the state of Massachusetts, and Massachusetts students leaving the Institute locate in widely separated points all over the country. This fact should not be lost sight of by

its beneficiaries, the manufacturing and great commercial interests, who have been largely benefited by the pioneer work of the Institute reflected in the various technical schools patterned after it, and by the work of Institute graduates themselves. Doctor Maclaurin told his audience of the wonderful opportunities offered by the magnificent site on the Charles River Esplanade, a location dominating every other in the city of Boston, and probably not excelled anywhere in the country. The development of this property and the designing of the buildings should be in keeping with the spirit of the Institute and the dignified position it holds, and in order to carry out the work properly a very large sum of money will be needed. He said that Coleman du Pont's gift of half a million made this whole enterprise possible and the successful work of the Committee on State Aid which secured from the state an appropriation of \$100,000 a year for ten years to be used for running expenses, relieved the alumni of the burden of paying last year's coal bills, and left them free to devote their entire energy to the raising of a new alumni fund for building purposes which in amount and character would make a new record among college alumni bodies. He had abundant faith that with the alumni thoroughly enlisted in the work there would be ample resources for every need.

The President was greeted with frequent bursts of applause and the temper of his audience indicated that the news he brought to them was indeed welcome, and that the Central West would not be found at the rear when the final figures of the Alumni Fund were turned in. The quartet then began to perk up and the congregation joined in singing a verse to

the tune of "Billy" which sounded like this:—

For when we talk we like to talk of Richard—
 For we are very proud of him—
 And where there's news we like to hear from
 Richard—
 He always tells us something new—
 And when we dine we like to dine with Richard—
 For Richard is the head of Tech—
 But when we drink—But when we drink—
 We always drink to Dick!

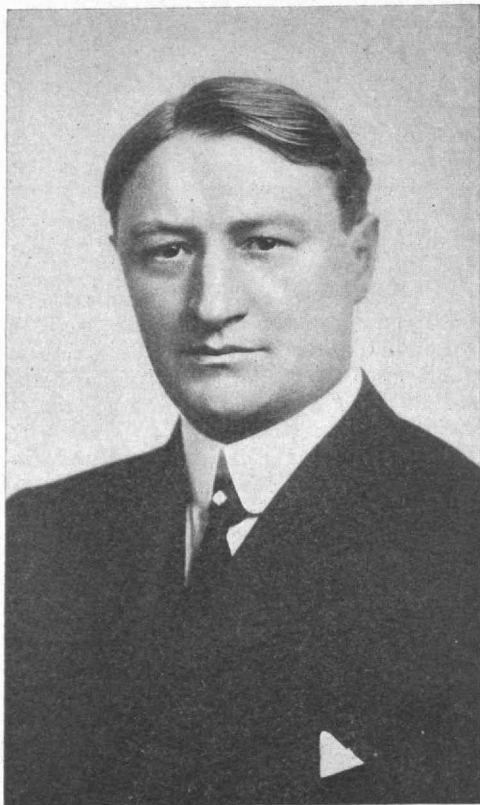
President R. E. Schmidt, '87, who arose to introduce the next speaker was interrupted by the following warble by the audience to the tune of "Oh You Beautiful Doll."

Oh you Richard E. Schmidt—
 You great big Schmidt-ity-Schmidt—
 Let us drink a bumper to you,
 We could never do without you.
 Oh you beautiful Doll
 You great big beautiful Doll
 If you ever quit—or should give us the mit—
 We'd have a fit—there's not a doubt of it—
 Oh-Oh-Oh-Oh-Oh-Oh Richard E. Schmidt.

After recovering his poise, Schmidt made the announcement that five of the members had been asked to tell the association what they would do if they were President of the Institute.

F. W. Clark, '80, the first speaker, compared the Institute, its resources and teaching staff, to an issue of bonds; its graduates to preferred stock and the students to common stock. If he were President, he said, he would try to capitalize the technical value of these securities by offering the services of the Institute and its trained body of officers to all communities in the United States, desiring to establish technical schools; to take actual charge of the instruction in these various schools, not only sending competent instructors, but arranging the studies so that the courses would be identical with those given at the central institution in Boston; the Institute would not assume any financial obligation, the expenses to be entirely borne by the various schools. The young men attending these various schools would not be on the same level, but if they had an opportunity to adjust themselves in

two or three years in these branch institutions, they could finish out their education, and take their degree at the main institution in Boston. This plan would be financially much easier for the students many of whom could live at home during the first two or three years of their student life. A movement of this kind would find an ever-increasing amount of public-



Richard E. Schmidt, '87, President of the Northwestern Association

spirited citizens who would contribute to the endowment of these various schools and amply support the Institute itself. When this should come about through his presidency, he would change the name to the National or International Institute of Technology.

Sam Marks, '07, who was the next speaker, told how proud he was to be considered President of the Institute of

Technology even for a moment. The Institute was one of the few things in this world which stood absolutely first in every particular, even George Washington had to play second fiddle sometimes. He felt, as President, that it would be his conscientious duty to impress upon the students the desirability of taking advantage of their religious privileges and would made attendance at "chapel" compulsory.

Ned Hagar, '93, declared that if he were President he wouldn't make so much fuss about raising three million dollars in two or three years. He outlined a very plausible scheme for raising six million in one year and no one present had a doubt that he could do it. If he were President he would cut out examinations because they are "so hard on the boys." He thought that "chapel" was too far away and in the new location should be more accessible. Incidentally he mentioned the fact that the cement he has offered for the new Technology has been all barrelled up and has been waiting call for some time. If it was anything else but Universal cement it would undoubtedly spoil before it would be needed for the new buildings.

Lonsdale Green, '87, had felt, before the selection of President Maclaurin, that the Corporation might ask him to assume the executive charge and had long ago prepared a definite policy for the Institute. He said that his observation was that on leaving the Institute men were prone to place great emphasis on the hardships necessary to secure a degree and as they seem to derive a great deal of satisfaction from this feature his plan was to emphasize the discipline with a capital D and lay out the course like a term at Joliet Penitentiary, so that when the students were finally discharged they would know that they had really been through something. He explained that the equivalent of his title at the head of this Institution would be warden. In this capacity he would establish a post-graduate course, and the secretary of the association who insisted on his making this speech would

be encouraged to join the first class in the institution.

Theodore W. Robinson, '84, gave some of his serious observations as a manufacturer and employer of technical graduates. His remarks were straight to the point and were heartily applauded by the audience. His plea was for the broadening of technical education, so that the student would get some idea of the fundamental problems of the executive. The conditions today are such that a comparatively plentiful supply of engineering talent can be drawn on for special work; these enterprises are more concerned in securing executive rather than scientific ability. He emphasized



Meyer J. Sturm, '96, Secretary

the need of scientific executives for the ever-growing opportunities open to students having scientific education and the proper business training. Another matter on which Mr. Robinson placed much importance was the great advantage of increasing the strength and activities of the central alumni organization by placing the business of the association in charge of some practical man well known to the alumni and having proper qualifications who should give much of his time to the upbuilding of the subsidiary units, the local alumni associations. He believed that there should be a closer relationship existing between the main alumni body and the various units and that until the entire matter was placed in the hands of some one competent to be the general manager of the alumni association, the latter would not accomplish its full degree of usefulness.

The last speaker of the evening was I. W. Litchfield, '85, a former resident of Chicago, who referred to the influence that the spirit of the Northwestern Alumni had exerted on the entire association. He told of the wonderful things

that had been accomplished by President Maclaurin during the short time he has been at the helm and of the feeling of confidence and security the friends of the Institute have in its future policy. The most important matter now to be considered is the great Alumni Fund which is to be raised for the purpose of building the new Institute. The alumni will not be called upon for the entire amount to be sure, but the degree of substantial interest taken by friends of the Institute will be somewhat in proportion to the size and character of the Alumni Fund. When the Income Fund was raised conditions in Chicago were such that the matter was not fully understood and the men of the Central West were not largely represented on the list of donors. The Alumni Fund soon to be raised is an enterprise in which every man should take a part and no sum will be too modest to show the loyalty of the giver to the Institute. He thought that the money would be raised quickly and the total sum would be a surprise even to the alumni themselves.

Before the speakers were introduced, Mr. Frederick K. Copeland, '76, announced the death of Mr. Frederick Greeley, '76, a prominent alumnus, who has long been identified with the Northwestern Association. Appropriate resolutions were read and adopted.

The President in Syracuse

President Maclaurin arrived in Syracuse late in the afternoon of February 3 and a committee of the M. I. T. Club of Central New York headed by J. P. Barnes, '05, escorted him to Syracuse University where he made a call upon Chancellor Day. The banquet was held at The Onondaga and it is needless to say that interest centered in what Doctor Maclaurin said about the new site and the bright prospects for the future. He prefaced his remarks by saying he believed that the athletic side of college life had become too much of a business in many colleges. He felt that the Institute is particularly fortunate in the

tradition that has grown there; that it is a place for men to work and not for boys to play. He said that he believed that athletics had a very definite place in that they go to the building up of the man just as his social life prevents him from becoming too self-centered to be effective. He believed that the Institute was in an ideal position as athletics are a part of the life of the student body at large.

The President reviewed the history of the past year showing how, step by step, the problems in the way of the physical growth of Technology had been removed by General du Pont's gift, by the appropriation from the state of Massachusetts which will pay the running expenses of the Institution for ten years to come, and by the securing of the new site on the Charles River Basin in the heart of greater Boston. In speaking of the character of college buildings he said that 90 per cent. of them in this country were built without particular reference to the use to which they were to be put. In his recent tour of the alumni associations he noticed that more attention was paid to the arrangement of factories than to the construction of college buildings.

Lunch Meeting at Cleveland

About twenty Technology men in the city of Cleveland, Ohio, gave an informal lunch to Mr. I. W. Litchfield of the TECHNOLOGY REVIEW while he was in that city on January 31. The meeting was held in a private room of the beautiful new Athletic Club which has recently been completed. The keenest interest was manifested in the recent developments at the Institute and especially in the fund which is to be raised for building the new Technology.

Most of the Tech men in Cleveland attended the meeting of the Technology Club of Northern Ohio at Akron, January 24, and were enthusiastic in their commendation of the hospitality of the Akronites.

BIRMINGHAM GIVES PRESIDENT FREEDOM OF TOWN

New Association extends royal welcome—Prominent citizens join in hospitality to Technology head

The visit of President Maclaurin to Birmingham on February 24 was made memorable by an enthusiastic meeting in which Tech men, the industrial leaders of the district, and other representative citizens took part. An informal dinner had been previously arranged and when it was learned that it would be possible to have the President as the guest of honor, it was decided to invite a number of guests in order to give the Birmingham industries and the Institute of Technology an opportunity to become better acquainted.

Doctor Maclaurin arrived on Saturday afternoon, and was met at the station by the committee, consisting of H. G. Woodward, '88, E. C. Wells, '92, and M. R. Scharff, '09. A brief automobile trip through the beautiful residential portions of the city was taken. At 7.30 thirty-one persons sat down to an excellent dinner at the Birmingham Turn Verein. It was notable that nineteen out of the twenty-two Tech men of the Birmingham District were present, the absence of the other three being due to illness or absence from the city.

E. C. Wells, '92, superintendent and chief engineer of the Hardie-Tynes Mfg. Co. presided, and introduced the speakers with grace and dignity. Morris Knowles, '91, spoke first on "The Service of Technical Men in the Regulation of Public Utilities," and gave an instructive and suggestive talk which was especially well received by those present for its valuable suggestions applicable to the serious public service problems with which Birmingham is now struggling.

The toastmaster then introduced Mr. T. H. Aldrich, a pioneer coal and ore mine operator of the District, a conchologist of wide reputation, and an expert on the geology of Alabama, second to none. Mr. Aldrich spoke most enter-

tainingly on "Coal and Ore in Alabama," picturing the extent of the deposits, outlining the growth of the great industries dependent on them, and relating some amusing personal experiences of the early days of coal mining.

Mr. George Gordon Crawford, president of the Tennessee Coal, Iron & Railroad Co., was the next speaker, and his subject was "Iron and Steel in Alabama." Addressing his remarks largely to Doctor Maclaurin, Mr. Crawford gave an illuminating exposition of the great industry which his company has taken so large a part in developing, pointed out the lines along which economies were being constantly sought, and expressed the cordial hope that Doctor Maclaurin's visit may result in the coming of more Tech men into a section which offers so many attractive technical problems as this.

Finally Doctor Maclaurin was called on, and he sketched the great growth of the Institute, its present prosperity and international reputation, and the splendid plans under way for its future development. To the Tech men who have been living so far removed from Boston, with infrequent news of the Institute, it was an absorbing story. To the guests, it gave a new appreciation of the greatness of Technology that cannot but have lasting results.

Among the other guests were Frank H. Crockard, vice-president and general manager of the Tennessee Coal, Iron & Railroad Co., James Bowron, of the Southern Iron & Steel Co., M. C. Sloan, assistant to the president, Birmingham Railway Light & Power Co., E. L. Brown, of Brown Bros. & Co., Robert Jemison, president of the Jemison Real Estate & Insurance Co., W. P. G. Harding, president of the First National Bank; and Mr. Ryan of the *Birmingham Age-*

Herald. Regrets were received from Doctor Denny, president of the University of Alabama, and from Mr. C. T. Fairbairn, general manager of the Republic Iron & Steel Co.

The Tech men present were E. A. Nash, Tuscaloosa, Ala.; Morris Knowles, Pittsburgh; B. F. Wilson, Jr., W. H. Beers, Jr., W. E. Hadley, A. W. Allen, A. F. Mohan, E. A. Redman, E. P. Quigley, J. R. O'Hara, F. O. Adams, M. R. Scharff, G. T. Gambrill, H. G. Woodward, E. C. Wells, P. Smith, J. H. White, W. H. Johnston, H. Tutwiler, and N. C. Walpole.

On Sunday, February 25, a special train and private car were put at the disposal of the party provided to show President Maclaurin over the District, through the kindness of the Tennessee Coal, Iron & Railroad Co. The party included Doctor Maclaurin, Frank H. Crockard, A. H. Woodward, '90, vice-president and general manager of the Woodward Iron Co., Morris Bush, chief engineer of the Woodward Iron Co., Robert Jemison, E. C. Wells, '92, and M. R. Scharff, '09. The train was taken over the tracks of the Birmingham Southern Railroad, and the Woodward Iron Co. Railroad, and stops were made at Edgewater, the newest coal mine of the Tennessee Company and the best equipped in the District; at the Woodward ore mines; at Corey, the model city, where the Tennessee Company's new \$3,000,000 coke by-product plant is located, and at the Tennessee Company's furnaces and steel mill at Ensley. This all-day trip gave Doctor Maclaurin an excellent birds-eye view of the great technical industries of the Birmingham district, and impressed him with the magnitude of their development as nothing else could have done.

On returning to Birmingham, Doctor Maclaurin was taken for an automobile trip through the suburbs of the city, and left that evening for Boston. He left in Birmingham a renewed enthusiasm among the alumni, and a newly aroused interest in Tech on the part of some of Birmingham's leading citizens. It is the

general opinion of the Tech men of the district that nothing could have been more timely or more helpful to the cause of the Institute in the South than the President's visit to Birmingham.

The original intention of this meeting was to adopt a constitution and elect officers for the recently formed South-eastern Alumni Association, but it was considered inappropriate to intrude business on so unusually auspicious an occasion, and another informal dinner for this purpose has been arranged, to take place March 30.

MAURICE R. SCHARFF, '09.

A New Tech Button

One of the most enthusiastic of the entire instructing staff is Major Edwin T. Cole, the new head of the department of military science. Major Cole has the real Technology spirit although he was graduated from West Point, and during his short time at the Institute he has made hosts of friends among the students and instructing staff. Among the schemes he has proposed for promoting closer social relations among the students, is that of wearing a Tech button and steps have been taken to secure a supply of these buttons. They will not be of the ordinary metal kind, but will be made of cardinal and gray ribbon specially manufactured in France. It will be like that of the Loyal Legion, inconspicuous but serving to identify Tech men whenever the buttons are worn. The West Point button of yellow and black is generally worn by West Pointers when not in uniform. It is believed that a button of this kind will become popular among the alumni as well as undergraduates. It simply indicates that the wearer is a Tech man and they will be especially in demand outside of the city of Boston. Bursar Rand has undertaken to secure a supply of the buttons and the REVIEW will make announcement as soon as the buttons are ready for distribution. Send your orders to him.

MEETING OF TECH MEN IN PITTSBURGH

The President tells of Alumni accomplishments and of the new Technology—
Prominent educators entertain Doctor Maclaurin

The annual banquet of the Pittsburgh Association of the Massachusetts Institute of Technology on January 23, 1912, closed the third link in the chain of events covering the recent tour of Doctor Maclaurin to the various alumni associations.

We were all delighted at the prospect of President Maclaurin's visit, and the occasion has again made him ever dearer and nearer to the hearts of all Tech men in the Pittsburgh District.

On the morning of the 23d the committee consisting of Bickford, '01, Bishop, '98, Dewey, '07, Rapelye, '08, and Reed, '97, were on hand to welcome the Doctor at the Pennsylvania Station en route from the Washington Association.

After breakfast at the University Club the party left for the University of Pittsburgh where Doctor Maclaurin met Chancellor S. B. McCormick and Dr. S. B. Linhart, secretary of the University.

An extended tour of the buildings was planned by Bishop, '98, and Doctor McCormick explained in detail the plans of building and extension of the University which were made by competition of architects, and for which plans are being executed as funds will permit.

Luncheon was served at the University Club, Doctor Maclaurin being the guest of Doctor McCormick who was entertaining Dr. M. J. Rosenau from Harvard Medical School.

Doctor Rosenau was lecturing at the University of Pittsburgh on "Sanitation Relating to Public Health," and we had the pleasure of his presence at our dinner in the evening.

In the afternoon Doctor Maclaurin visited local alumni under the direction of W. Edgar Reed, '97.

At seven o'clock sharp we gathered around the banquet board and enjoyed one of the famous dinners for which the

chef of the University Club is famous. The banquet decorations were large baskets of red tulips and narcissus. The toastmaster of the evening was Dr. John Brashear—"Pittsburgh's First Citizen"—who was introduced by the President of our association, Mr. Warren I. Bickford, '01.

Doctor Brashear spoke most feelingly of his great friendship and admiration for Doctor Maclaurin and his love for the Institute and its "Tech man." He delighted those present with anecdotes of science in his most genial and fascinating way.

Doctor Maclaurin spoke on "The New Tech." He told us of the history of the past, present and the future. He did not fail to bring out most forcibly the great responsibility resting on every one connected in any way with the Institute, as to the planning and execution of the building and development for our great future.

Doctor McCormick spoke on the "Rebuilding of an Old University." His problems have been in general such as confront us today, and he fully predicts that our "Tech men" of today will build the future Tech of tomorrow with much credit to add to the wonderful standards and traditions of our beloved Institute.

Dr. Arthur Hammerschlag, director of the Carnegie Technical Schools, gave an interesting talk on the "Building of New Technical Schools." He outlined the scheme and conception of the founder of the schools and removed the false impression that many considered the task easy to build schools with unlimited capital while to the contrary it was necessary to practice the greatest care, judgment and economy.

The competitive plan of architecture and execution was explained and how

the parts of the plans are being executed from the general scheme.

Mr. C. Snelling Robinson, '84, first vice-president of the Youngstown Sheet & Tube Co., and Mr. Dwight P. Robinson, president and general manager of Stone & Webster Engineering Corporation of Boston, Mass., were present. We can always count on "C. S." for a little talk and he honored us on this occasion.

On the following morning the Doctor visited the Carnegie Technical Schools where under the personal supervision of the director he was filled full of the "joys and trials" and objective points in the building of these schools.

Mr. S. B. Ely, '92, had arranged luncheon at the Duquesne Club where the following guests met the President:—Dr. John A. Brashear, Rev. Dr. H. D. Lindsay, Doctor Holland. Dr. Arthur Hammerschlag, and W. Lucien Scaife.

L. K. YODER, '95.

The Washington Dinner

The annual dinner of the Washington Society, given in honor of Doctor MacLaurin, January 22, was the 13th anniversary of the first meeting of the society. It was held at Hotel Arlington with W. J. Gill, Jr., '04, as toastmaster. In addition to Doctor MacLaurin the speakers were F. H. Newell, '85, director of the United States Reclamation Service, and M. O. Leighton, '96, chief hydrographer of the United States Geological Survey. There were thirty-two members of the society present and the greatest interest and enthusiasm was evinced when the President told of the progress made by the Institute during the last year and the acquiring of the new site for the Institute. It looked to the audience as if the problems that bore so heavily but a few months ago, are likely to be solved in the very near future, and that Technology is to come to its own. The success of the banquet was due to the efforts of the banquet committee which consisted of Parker Van P. Dodge, '07, Myron Davis, '09, and Frederick W. Swanton, '90.

Alumni in Atlanta Organize

While the alumni of Birmingham were celebrating the first meeting of Tech men in that city, January 27, they were somewhat surprised and much pleased to receive a congratulatory message from the Technology alumni located in Atlanta who had assembled at the Georgian Terrace on the same evening, the first gathering of local Tech men in Atlanta. A private room in the hotel was tastefully decorated with flowers, streamers and banners bearing the Technology colors of cardinal and silver gray. The dinner was followed with informal short speeches made by all of the men present, and the old Tech spirit and good fellowship prevailed.

A local alumni association was effected and officers elected for the ensuing year. Those present were: F. W. Hadley, '93, manager, Atlantic Water and Electric Power Company, Atlanta; F. F. Forster, '96, traveling salesman with Draper Company, Atlanta; W. Kelley, '98, analytical chemist with Picard-Law Company, Atlanta; H. M. Keys, '99, fundamental plan engineer, with Southern Bell Telephone and Telegraph Company, Atlanta; C. A. Smith, '99, superintendent of roadways, Georgia Railway & Electric Co., Atlanta; W. R. Collier, '00, contract manager, Georgia Railway & Electric Co., Atlanta; H. W. Key, '06, sales department, General Electric Company, Atlanta; H. W. Beers, '06, chief engineer, Southern Ferro-Concrete Company, Atlanta; D. C. Picard, '03, president, Picard-Law Company, Atlanta; Arthur H. Turner, '09, assistant engineer, Southern Ferro Concrete Company, Atlanta; L. M. Thacher, civil engineer, Georgia Railway & Electric Co., Atlanta; J. Philip Wey, engineer in charge, Peachtree Creek Disposal Plant, Atlanta.

Professor Miles S. Sherrill, '99, assistant professor of theoretical chemistry at the Institute, has been called to the University of California at Berkeley where he has commenced his work as special instructor in chemistry.

GREAT TECH MEETING AT AKRON

Local Alumni Entertained Doctor Maclaurin and the Technology Club of Northern Ohio—A new record set

From all accounts that have reached the office of the TECHNOLOGY REVIEW, the meeting of the Technology Club of Northern Ohio which was held at Akron, January 24, was one of the most spirited that the President saw on his trip. This is the first meeting of the Northern Ohio Association that has ever been held at Akron. There are twenty-five Tech men in Akron and if one of them had not been too ill to come, the attendance would have been 100 per cent. Besides the twenty-four men from Akron, there were eighteen from Cleveland and three guests; these were Doctor Maclaurin, F. C. Seiberling, president of the Goodyear Tire & Rubber Company and Doctor Church, president of Buchtel College. A large number from Cleveland reached Akron at noon and enjoyed a trip over the works of the Goodyear Tire & Rubber Company. The Akron hosts then took their visitors in automobiles to the Portage Country Club where the dinner was held. The souvenirs of the evening were in the form of a miniature automobile shoe bearing the legend "Technology Club of Northern Ohio, The Rubber City," and taking the place of the wheel itself, was a name card for the individual guest. A little twist drill provided by the Technology contingent of Whitman & Barnes pierced a small segment of the tire and attached to this was a loop of cardinal and gray ribbon. Professor H. B. Dates, '94, of the Case School of Applied Science at Cleveland, who is president of the association, presided at the dinner. A brief, but cordial address of welcome was made by Mr. Paul Litchfield, '96, of Akron who was followed by a splendid address on the "New Technology" by President Maclaurin. He reviewed the important events of the past year, emphasizing the large part that the alumni had taken in the great advances that have

been made. He spoke of the necessity of an increase in endowment but more particularly of the alumni fund soon to be raised which is to be the cornerstone of the new Technology. The celebration of the fiftieth anniversary of the granting of the charter to the Institute was a most remarkable event. It was conceived and conducted entirely by Tech men, and the



Akron Banquet guest tag

sons of the Institute furnished the remarkable array of papers read at that time and which have since been collected in the book, "Technology and Industrial Efficiency."

The gift of T. Coleman du Pont, '84, made it possible to secure a magnificent site on the banks of the Charles River and the increased aid from the State which was the result of a campaign carried on by a special committee of the

Alumni Association provides the running expenses of the Institute for a decade to come.

The President reviewed briefly the interesting facts connected with the selection of the new site, speaking of its accessibility, its dominating location, and ample size. He then referred to the problems that were attached to the opportunities before us. The group of buildings should be of dignified magnificence architecturally, but even more important than this will be the entire arrangement with reference to the purpose to which the plant is to be put. The President then spoke briefly of the social life of the students at the Institute today which in many respects is almost ideal. The athletic policy is unique and most satisfactory. The results of this same athletic policy have made the Institute the envy of colleges and universities where inter-collegiate athletics run riot.

Doctor Maclaurin quoted the Royal Commission of Canada which recently visited the Institute and which said it had no equal. He also told of the high opinion that Mr. Edison expressed for the Institute who already has placed his commendation on it by sending his son there.

Mr. F. A. Seiberling who was the next speaker told of his very satisfactory experience with Technology men in connection with his business. There are now fifteen men employed by the Goodyear Tire & Rubber Company, and he said he had a standing order for the best men in the graduating class every year. He expressed his enjoyment of the evening and his appreciation of the President's address. The meeting was an enthusiastic one and Mr. Glover, '08, and his "Chapel Glee Club" contributed very much to the occasion. A pianist and harpist assisted in the musical program. Through the kindness of Mr. Louis M. Latta, '89, a special car was chartered to take the Cleveland men home after dinner.

The visiting guests went away permeated with the generous hospitality and good fellowship of the Akron men. The meeting set a new mark for the Technology Club of Northern Ohio.

Minneapolis Extends a Welcome

The visit of President Maclaurin to Minneapolis, January 29, was an event of unusual interest to the local alumni of the Institute living in the vicinity of the two cities. Doctor Maclaurin was met on his arrival at the railroad station by President Vincent and Professor Bass, of the University of Minnesota, accompanied by a delegation of Tech men headed by Mr. W. H. Bovey, '94, and Clifford C. Hield, '10, secretary of the Technology Club of Minnesota. He was driven over the river to the University which he inspected and where he received a delegation of local press representatives. At noon a luncheon was given for him at the Minneapolis Club where he met a number of business men of the city and members of the faculty of the University of Minnesota. The afternoon was devoted to the inspection of the new buildings of the University of Minnesota which are now being erected in which Doctor Maclaurin took a keen interest in view of the building projects which are now before him and the Corporation of the Institute.

The annual banquet of the club was held at the Radison Hotel in the evening. Doctor Maclaurin's theme was the tremendous influence the alumni have had on the Institute in the past and the still larger things they are planning to do for their Alma Mater in the near future. He recounted particular instances where alumni work has brought definite and very large returns and stated that it was due to this organized effort on the part of the Alumni Association as well as to the devoted loyalty of individual members, that the Institute was now in a position where it was hopefully looking to the future. His talk was conducive to the highest optimism and his auditors were intensely interested in the remarkable showing that the Institute has made during the last few years.

The other speaker was Dean Shenihon of the Engineering College of the University of Minnesota who described briefly the plans for the new equipment of the engineering college.

DETROIT INSTITUTE OF TECHNOLOGY FOUNDED

Will turn over endowment to Alumni Fund when call comes—Detroit men will own a few bricks in the New Technology

The Detroit Technology Association has rejoiced much both individually and collectively during the past few months over the happy solution of the site problem and the bright prospects for Technology. The rejoicing culminated January 31 when Doctor Maclaurin stopped off here on his semi-western tour, and acted as a focus for a Tech gathering. The Detroit part of the tour was a great success from the point of view of the visitees, and the visitor seemed to enjoy himself.

Doctor Maclaurin arrived in Detroit at about 4 p. m. and was met at the depot by a group of Tech men and taken to the University Club. After a short rest he was escorted into the library of the University Club where more Tech men and others had begun to gather. The "others" consisted of certain prominent Detroit business and professional men who had been invited to drop in to talk with Doctor Maclaurin informally and have a smoke. Most of them had been told that Doctor Maclaurin was Scotch and a good sport, and they came feeling honored at being invited, and privileged to meet the President of a renowned school. They left expressing their pleasure and their respect for the personality of Doctor Maclaurin.

The dinner was served soon after seven o'clock to about 35 Tech men. After all were seated there was quiet for some time, except for chuckles as the diners perused Fred Sutter's comic menu. It was cleverly modeled after certain pages of the Tech Catalog that we all know, but the resemblance ended there and the substance was such as no faculty ever dreamed of seeing in that form. Here is the menu:

DETROIT INSTITUTE OF TECHNOLOGY

Graduates must complete each of the following courses. No repeating of courses will be permitted

under any Conditions. Post-Graduate work or specializing in Course I, is discouraged.

Course I.—Irrigation

High Ball, Manhattan or Martini Cocktail

Course II.—Preparatory Work

Caviar Canape

Blue Point Cocktail

Celery

Ripe and Green Olives

Course III.—Hydraulics

Tomato Bouillon

Course IV.—Strength of Materials

Roast Chicken

Long Branch Potatoes

Brussels Sprouts

*See note

Course V.—Social Ethics

Fruit Salad

Course VI.—Concrete Construction

London Pudding

Thesis:

Cheese and Crackers

Demi-tasse

Note:—About here there is an oasis, with a choice from Course I, for those who feel that they need it.

Graduates will not receive Dip'omas unless dues and other charges are paid in full.

The speeches by local talent were not regarded seriously by anyone—not even the speakers themselves. They consisted merely of five-or six-minute harangues by Preston M. Smith, '05, W. R. Kales, '92, Marvinne Gorham, '93, Currier Lang, '04, Emil Lorch, '93, Tracy Lyon, '85, and H. W. Alden, '93.

The real treat of the whole affair was Doctor Maclaurin's speech. "Speech" is hardly the right word—it was more a friendly, optimistic, inspiring talk of the leading Tech man to Tech men. It covered the negotiations for the purchase of the site, it illuminated many aspects of Tech's internal and external life, it showed us ourselves as we have been and it showed us what we may become if we grapple every problem that confronts the Institute, and put enough shoulders to the wheel. Doctor Maclaurin's talk left us with few questions to ask and nothing to add. It was most satisfying. Fred Sutter's closing remark was that "when the call comes, the Detroit Tech men will not

WASHINGTON TIMES Institute Alumni in Banquet at Arlington

Dr. Richard C. MacLaurin, president of the Massachusetts Institute of Technology, Frederick H. Newell, '95, director of the United States Geological Service, and a hydrographer of the United States Navy, were the speakers at the "Tech" alumni banquet at the Arlington Hotel last night. The serious problems facing the

trying two passengers in his monoplane, attained an altitude of 3,526 feet.

'TECH' PRESIDENT ON TOUR

Head of Massachusetts Institute Will Visit Alumni in the Middle West.

BOSTON, Jan. 20.—President Richard C. MacLaurin of the Massachusetts Institute of Technology, in pursuance of his duty of Technology, in pursuance of his duty of keeping in close touch with the alumni of that institution, today began a two weeks' western tour.

—CHICAGO POST

DR. M'LAURIN WILL ARRIVE HERE TODAY

President of Boston "Tech" Will Be Banqueted and Entertained in Birmingham

BIRMINGHAM HERALD

MACLAURIN TO PAY VISIT HERE

Alumni of Massachusetts Institute Prepare to Entertain Him. Graduates of the Massachusetts Institute of Technology, who are located in Pittsburgh, are preparing a royal welcome for Richard C. MacLaurin, president of that seat of learning, when he visits this city.

PITTSBURGH GAZETTE

EDUCATOR IS COMING

President of Massachusetts Institute of Technology to Speak Here. Cleveland members of the Technology association are much interested in the visit of President Richard C. MacLaurin of the Massachusetts Institute of Technology.

wind rose as the mercury fell. The

ROCHESTER

EDUCATOR HERE AS CLUB'S GUEST

Head of "Boston Tech" Addresses Graduates of Institute.

ENTERTAINED AT MECHANICS

Members of the Rochester Technology Club, which is composed of graduates of the Massachusetts Institute of Technology of Boston, had their guest at a banquet at the Essex Valley Club last night Dr. Richard C. MacLaurin.

BANQUET TENDERED DR. R. C. M'LAURIN

President of Boston "Tech" Is Entertained

SEE DISTRICT TODAY

Dr. MacLaurin Speaks on Greatness of Birmingham—Addresses Made by Gordon Crawford, Postmaster Aldrich and Others

—WASHINGTON HERALD

JANUARY 24, 1912.

Chicago Is to Be Host to Boston "Tech" President

GRADUATES of the Massachusetts Institute of Technology in and about Chicago are busy with plans for the entertainment of Richard C. MacLaurin, president of that institution, during the latter part of this week, and particularly with plans for the dinner which will be given in his honor at the University Club on Saturday evening. In the past there always has been a surprise as one of the principal features of this annual visit.

—CHICAGO POST

BUFFALO COMMERCIAL

DR. M'LAURIN THE GUEST OF HONOR.

President of Massachusetts Institute of Technology Explained Plans For New Institute.

Fifty graduates of the Massachusetts Institute of Technology tendered a dinner to Dr. MacLaurin, president of the Institute, last night. The dinner was held at the Buffalo Club. Maurice D. Doherty was the guest of honor at this dinner.

DETROIT

PROF. MACLAURIN TO SPEAK IN DETROIT

BOSTON, Jan. 21.—President Richard C. MacLaurin, of the Massachusetts Institute of Technology, in pursuance of his policy of keeping in close touch with the alumni of that institution, today began a two weeks' western trip. He will visit Pittsburgh, Akron, Cincinnati, Chicago, Minneapolis and on his return trip stopping at Detroit, Buffalo and other cities.

BUFFALO

this is the greatest bargain of the year.

M'LAURIN HERE TO ADDRESS GRADUATES OF TECH INSTITUTE

President R. C. MacLaurin of the Massachusetts Institute of Technology is in Buffalo to address the local alumni of the institute this evening. He was due this morning, but did not arrive until shortly after.

ON TIMES, FRIDAY, JAN.

TECHNICAL SCHOOL GRADUATES TO GIVE BANQUET FOR CHIEF

President MacLaurin of Massachusetts Institute Will Be Guest Here.

Two hundred and fifty graduates of the Massachusetts Institute of Technology will greet President Richard C. MacLaurin at a banquet to be given Monday night at the Arlington Hotel. President MacLaurin is now making a trip which touches at the centers where "Tech" alumni are numerous, and it is expected that his speech Monday will deal with the

MINNEAPOLIS JOURNAL

Boston "Tech" Head Tells Of Demand for Experts

City Health Men Greatly Needed,
Says Dr. R. C. MacLaurin—
Addresses Alumni.

Boston "Tech" can't supply the demand for expert city health men, says Dr. Richard C. MacLaurin, the president, who last night addressed a meeting of the Tech club of Minnesota at the Hotel Radisson. While training of that sort is not distinctly an engineering affair, Dr. MacLaurin says the Massachusetts Institute of Technology has conducted a department of health work in the last ten years.



TECHNOLOGY CLUB ANNUAL DINNER

Bursar Rand and L. K. Rourke
Speakers at Gathering at the
Country Club Last Night.

THE INSTITUTE OF THE FUTURE

A moon almost full beamed on the members of the Technology club of New Bedford as they trooped to the

WAS DINED BY "TECH" ALUMNI

President MacLaurin -Guest
of Graduates of Mass. In-
stitute of Technology.

VISITS BIG PLANTS

Entertained at Mechanics
Institute Preceding Dinner
at Genesee Valley Club.

Rochester graduates of the Boston
"Tech" turned out in force yesterday
to welcome the President of the
Alma Mater.

ROCHESTER
TIMES

MASSACHUSETTS TECH PRESIDENT TAKES TRIP

BOSTON, Jan. 20.—President R.
C. MacLaurin, of the Massachusetts
Institute of Technology, in close touch

TOO MANY ATHLETES

Dr. MacLaurin Cites Dangers of
American College Spirit.

SPEAKS AT ALUMNI DINNER

President of Massachusetts In-
stitute of Technology at Onon-
daga Banquet—Also Scores the
Arrangement of College Build-
ings.

- SYRACUSE HERALD -

"I think there is far too much atten-
tion paid to athletics in many of the
American colleges."

HONORED AT BANQUET.

Dr. R. C. MacLaurin, president of
the Massachusetts Institute of Tech-
nology, was the guest of honor at the
thirtieth annual banquet of the Wash-
ington Society of the Institute at
last night.

WASHINGTON
HERALD

BUFFALO NEWS

King on "Business Methods Applied to
Farming."

MACLAURIN DINNER.

Richard C. MacLaurin, president of
the Massachusetts Institute of Tech-
nology, was the guest of about 60 mem-
bers of the alumni at the Buffalo Club
last evening. President MacLaurin is
visiting the various alumni in the prin-
cipal cities in the interest of securing
for a new institution to be erected
at Pittsburg.

BOSTON TECH MEN BANQUET AT THE UNIVERSITY CLUB

The annual banquet of the Pittsburg
of the Massachusetts Insti-
tute of Technology at the University club
last night. MacLaurin, presi-

"TECH" PRESIDENT GUEST OF ALUMNI

Dr. Richard C. MacLaurin Will
Speak at Dinner Tonight, Un-
folding College Plans.

Alumni of the Massachusetts In-
stitute of Technology are entertaining
President Richard C. MacLaurin today.
He is the guest of honor tonight
at the Hotel Radisson.

PHILADELPHIA

ARGES NEW POLICY FOR MASSACHUSETTS TECH

President MacLaurin Says More
Social Intercourse Is
Needed.

ASSIST ATHLETICS

A new epoch in the history of the
Massachusetts Institute of Technology
was inaugurated by President Richard C.

ALUMNI OF TECH HOLD BANQUET

Former Students of the M. I. T.
Dine at Georgian
Terrace.

The annual banquet of the alumni
of the Massachusetts Institute of Tech-
nology located in a new

be found wanting in the work of contributing one of the units that is needed for building a new Technology."

After dinner most of the party returned to the library where all chatted together and with Doctor Maclaurin until he was carried off to his train about midnight. The consensus of opinion on the whole affair may be summed in the remark, "We wish that this could happen oftener."

The Detroit Technology Association has no dates ahead but is open for such. If nothing unexpected turns up, our next meeting will be in the summer, somewhere along the river, but something unexpected will probably turn up. That would be too long to wait.—CURRIER LANG, '04.

A Notable Undertaking

Work has been actively started on the preparation of a new edition of the book, "Concerning the Massachusetts Institute of Technology," which was originally conceived by undergraduates and is now being continued by the Institute Committee. Those who have not a copy of the previous edition, should not fail to send for one of the forthcoming volumes as the book is a complete symposium of everything connected with the Institute and undergraduate life here. There is no charge for the book, but a donation of a dollar or less will be acceptable to aid the students in this undertaking which will probably run up to \$1,000 or more. This enterprise is unique in college life. It is financed entirely by advertisements and the committee in charge is sending circular letters to the alumni asking them to take space at the rate of \$35 a page, or business card at \$5. The purpose of the book is to give a true picture of the Institute with the idea of encouraging young men in preparatory and high schools to come here. The second purpose is to acquaint the entering students with the Institute, its traditions, customs and opportunities, giving them information in regard to its serious work as well as to its social activities. The book is given without charge to all entering students and is sent to correspondents who inquire for information in regard to the Institute.

The President in Buffalo

The annual banquet of the Technology Club of Buffalo was held at the Buffalo Club on the evening of February 1. The principal guest was President Richard C. Maclaurin of the Institute. Upon his arrival in the city he was given a reception at the Buffalo Club. There were sixty-five men seated at the table and the best of good feeling prevailed. Maurice B. Patch, '72, acted as toastmaster.

The President told the story of the new era in the history of the great technical school of which he is president, and of the plans for the creation of new buildings on the superb site recently made possible by the gift of an Institute alumnus on the banks of the Charles River Basin. He said that during the year the Institute had received larger gifts than any college in America, and the time is at hand when it will have even more abundant resources. The alumni and friends of the Institute are making a concerted movement to provide funds for building an impressive group of buildings, ample and fitting for the greater work which the Institute must undertake. The larger part of the money for these new buildings will come from alumni who are preparing themselves for a supreme effort for their Alma Mater. Doctor Maclaurin left in the morning for Rochester where he was entertained by the Technology Club of that city.

Death of Mrs. Crafts

Mrs. Clemence Haggerty Crafts, wife of Professor James Mason Crafts, who was president of the Institute of Technology from 1897 to 1900, died February 19, at the family residence, 111 Commonwealth Avenue, Boston. Mrs. Crafts previous to her marriage was Miss Clemence Haggerty of New York and she was the daughter of Ogden and Elizabeth Haggerty. Her marriage to Professor Crafts took place on June 13, 1868, at a time when he was professor of chemistry and dean of the chemistry faculty at Cornell University.

ANNUAL MEETING OF NEW BEDFORD ALUMNI

Louis K. Rourke, '95, and Bursar Rand guests of the Club—A novel electric Menu card

This is the way the New Bedford *Morning Mercury* described the dinner of the alumni of that city, February 29:

A moon almost full beamed on the members of the Technology Club of New Bedford as they trekked to the Country Club last night for the annual dinner. The Technology men have never forgotten the snowstorm of two years ago when they gave President Maclaurin his first taste of a New England winter, and since then the club has rested on its laurels and cautioned the dinner committee to study the Old Farmers' Almanac. President C. G. Whiton declared that his friend in Washington, Professor Moore, promised a couple of snowstorms this week, to give the annual dinner the proper setting, but they went astray.

Instead of a snowstorm without, the club has two within the club house. After dinner, F. H. Rand, who is bursar of the Institute of Technology, contributed one in the form of a talk about Tech that had the true Technology ring, and L. K. Rourke, '95, who is now commissioner of public works of Boston, but who had something to do with digging the Panama Canal, gave the Technology men a word picture of the work that Uncle Sam has undertaken and is doing on the Isthmus of Panama. Both speakers had topics that they made of intense interest, and they found keen listeners in the thirty members of the club.

The formality of a menu card was omitted and in its place, a double-track loop line, electric railroad, sawdust balasted, constructed by George H. Nye, chief engineer, and operated by David W. Beaman, announced the courses. First the car sped over the straight rails that occupied the center of the long table and around the circle at the head table, bearing a card with "Cotuits" engraved upon it.

The electric message was not released, however, until President Whiton had called for a silent toast to M. I. T. and the Stein song had been sung. After this the express car carried consomme, sirloin à la Country Club, with onions, salad, ices, and cigars and coffee to the end of the route, with other gentle reminders of the weaknesses or hobbies of members of the club. The railroad service was highly regarded.

Mr. Rand devoted his remarks to the Institute of Technology of the future. He brought greetings of President Maclaurin to the local club and provided the members with some information regarding the new M. I. T. on the Cambridge site.

The bursar paid a high compliment to the alumni of M. I. T., which, he said, is "the most perfectly organized body of alumni that is possessed by any educational institution." There are thirty-five Technology clubs in existence, not all on this continent, for Japan, the Philippines and Hawaii have Tech clubs.

Mr. Rourke, who was in Panama most of the time from 1897 until a year and a half ago, touched on the building of the canal, the working organization and administration in the canal zone.

The proposition advanced for a sea level canal he termed "a serious joke" and he declared that the decision of Congress for an 85-foot level, lock canal, is as it should be built in his opinion.

"There isn't money enough in the United States treasury nor patience enough in the people, to build a sea level canal that will work," he said.

Mr. Rourke discussed in the fashion of one who knew, many of the problems of the canal building. He spoke of the sustenance department, and he said that while he lived on the isthmus he lived as he does in Roxbury, except that the cost

was 25 per cent. less, although meat had to be bought in Chicago, transported to Colon, kept in cold storage and in refrigerator trains, yet the government is able to be butcher for 100,000 people and pay the bills, for less than the individual.

Since the United States has spent money and sacrificed lives to build the canal, Mr. Rourke expressed the opinion that it should be fortified, "so we may be dead sure of owning it for all time," he said.

The members of the Technology Club of New Bedford who enjoyed the dinner were: William B. Dowse, '74; David W. Beaman, '96; George H. Nye, '85; Benjamin C. Tripp, '97; Charles R. Hunt, '78; Chester A. Vose, '07; Alexander Hicks, '06; Clifford L. Wade, '08; William Law, '08; Laurence D. Chapman, '09; F. E. Earle, '06; Morgan Barney, '00; Thomas B. Akin, '87; J. W. Braley, Jr., '89; W. A. O'Leary, '95; Edgar B. Hammond, '73; A. R. Pierce, '91; C. G. Whiton, '94; C. F. Lawton, '77; C. F. Wing, Jr., '98; P. E. Young, '09; F. R. Peabody, '96; S. R. Hathaway, '87; J. K. Nye; W. S. Anthony, '04; Charles L. Faunce, '88; Edward H. Wing, '07; James A. Stetson, '99; William A. Robinson, Jr., '98; Richard D. Chase, '92; B. Karl Sharp, '07; Ira M. Chase, Jr., '98; R. A. Swan, '97.

Drummond's band of musicians provided the incidental movement during the evening.

Strong Interest in New Hampshire

The Alumni Association of New Hampshire is one of the most loyal local associations on the list although the club is only about a year old. There was great enthusiasm at the annual dinner of the association which was held at the Derryfield Club, Manchester, February 9. There were twenty-four men present representing classes from '74 to '11. Bursar Rand who was the speaker of the evening gave an entertaining talk on matters relating to the Institute which was listened to with interested attention. Among other things he spoke of the new Technology button which has been ordered and

received a commission for buttons for all the members on the roll of the association. A short business meeting resulted in the election of the following officers: president, J. L. Arnott, '75; vice-president, N. S. Bean, '94, and secretary-treasurer, Andrew Fisher, Jr., '05, 186 Lowell St., Manchester, N. H. It is planned to have an outing some time in June and the committee is determined to make it a howling success.

Death of Amos Binney

Amos Binney, '81, died at his home in Cambridge, Thursday, February 29. He prepared for college at Adams Academy in Quincy and was graduated from Harvard with the class of 1879. He then spent two years at the Institute studying especially industrial chemistry. He was identified with the Silver Spring Bleaching & Dyeing Co., of Providence, as superintendent and chemist and afterwards with the Walpole Dye & Chemical Co., leaving in 1887 to enter the real estate business. This came about through his appointment as trustee of an estate which gave him a liking for real estate. He was married in 1885 to Miss Julia Stone, of Boston. He was a member of the New-England Historic Genealogical Society, the Naval Order of the United States, the Loyal Legion, and for many years was president of the Society of the War of 1812, in Massachusetts.

Mr. Albers Honored

Mr. Homer Albers, lecturer on business law at the Institute, has recently been made Dean of the Boston University Law School, to succeed Professor Melville L. Bigelow, resigned. This honor to Mr. Albers will be welcomed by many students and alumni with whom Mr. Albers is very popular. Although he is a graduate of the Central Wesleyan College, of Warrenton, Mo., he has the greatest interest in Technology and in its undergraduates and is constantly lending his service and influence to advance the welfare of the institution.

ENTHUSIASTIC DINNER IN CINCINNATI

President Maclaurin brings good news from Boston and enlists support for the future—Prominent citizens guests

The Cincinnati M. I. T. Club had the pleasure of entertaining President Maclaurin of the Institute at its annual midwinter meeting at the University Club, January 25. Owing to the fact that the Board of Strategy, that laid out Doctor Maclaurin's trip saw fit to allot him to Cincinnati for only a few evening hours, the club was not able to show him the beauties and activities,—civic, commercial and educational,—of Cincinnati as was desired. Nearly forty of the faithful were present at the dinner and from the enthusiastic remarks made at the time and since, it was very evident that the President scored another record hit. In his usual happy way he gave us a clear and comprehensive view of Technology and some of the good things that are in store for her.

The club also had as a guest, Dr. John Whitrow, who has been for some time on the building committee of the Cincinnati Board of Education which has been forced to recognize the ability of Technology architects. In his speech he gave high praise to the training given at the Institute, even if it did turn out such men as Ellms, '93, who has done so much to put doctors out of business by his wonderful work at the filtration plant of the Cincinnati Water Works. Another speaker was Professor John Sherer, head of the Ohio Mechanics Institute of Cincinnati, an institution which has recently taken a position in the front, with fully equipped buildings; standing in the same relation to secondary schools as Technology does to colleges. Professor Sherer thought that Institute men could assist the work of their Alma Mater by studying the work done by his institution, and as an illustration pointed out several of his former students and teachers among the Tech men present.

Mr. Frederick Geier, one of the vice-

presidents of the Society for the Promotion of Industrial Education and a former director of Cincinnati University, spoke of the great benefit that schools like Technology are doing for the employing manufacturer by closing up the gap between him and the employees, and impressing upon employer and employee his particular duties and obligations. Technical training admirably fits men to take this middle ground and prevents employees from becoming mere cogs in the machine. Mr. H. M. Waite, '90, who was recently made city engineer of Cincinnati, was very much impressed by Doctor Maclaurin's discourse on units. He spoke of the plan which was being proposed by the city officials in connection with the university to provide a course in municipal engineering somewhat similar to the co-operative courses in mechanical, chemical, and electrical engineering now being practiced in the city. In this scheme, students work in pairs, one at the shops for a week while his alternate attended university courses, the next week reversing the situation. In the municipal course, the shop work will be replaced by work in the city departments, the latter part of the course being devoted to testing and engineering.

After the speaking had been concluded, reports of the secretary and treasurer were read. The nominating committee exceeded in constitutional authority in two respects: first, by reporting the election rather than the nomination of its slate, and second, in making the present secretary and treasurer permanent officers. Steps will be taken by the unfortunate victims to obtain legal relief. The slate declared elected was as follows: president, Frederick W. Garber, '03; vice-president, Hans F. Schaefer, '05; secretary, Stuart R. Miller, '07; treasurer, Robert Andrew, '01;

executive committee, R. W. Proctor, '94, Stanley A. Hooker, '97, and E. H. Kruckemeyer, '11. Felicitations were extended to Stanwood, '75, for the happy way in which he presided as toastmaster. The entire meeting adjourned at the end of the banquet to escort President Maclaurin to his train.—STUART R. MILLER, '07, Secy.

Information in Specialized Lines

In order to co-ordinate the useful and valuable information that is being collected from various sources, an organization has been established to be known as the Boston Co-operative Information Bureau which will act as a clearing house of special knowledge and is designed to facilitate the acquisition of information which is ordinarily more or less difficult of access. The organization was formed at the Institute in January, and Doctor Bigelow, librarian of the Institute, is president of the bureau. This will give engineers and workers of applied science opportunities to consult publications which are too highly specialized in character to be found in public libraries and will also extend the opportunities for exchanging information in specialized lines.

Inspecting Institute Laboratories

A delegation from the Maryland Legislature accompanied by members of the board of trustees and faculty of the Johns Hopkins University, headed by President Remsen, visited the Institute Saturday, February 3. The object of the trip was to obtain information which may be used in the building of a school for technical education which is to be built in connection with the Johns Hopkins University. A number of institutions were visited including Harvard University. In Boston, the delegation gave a dinner to members of the Technology and Harvard Faculties. Among the speakers were Professors Noyes and Sedgwick of the Institute.

Monthly Meeting at Providence

The Technology Club of Rhode Island is one of the largest on the list and holds weekly luncheons, monthly meetings and annual meetings that call out nearly every Tech man in Rhode Island. The last meeting of the club was held February 9 at Hotel Blackstone. Eighteen members were present and after dinner short addresses were made by two of the members: E. B. Homer, '85, described the new People's Savings Bank Building of Providence, and he was followed by Newton D. Benson, '99, who gave a very interesting address on "Cement and Concrete Construction." During the evening a telegram from *The Tech* was received sending greetings and asking for an account of the dinner to which Secretary Dart, '91, replied at length.

Professor Everett Official Measurer

As indicated in the February REVIEW, most of the larger yacht clubs on the Massachusetts coast have agreed that the department of naval architecture and marine engineering at the Institute is best fitted to take in charge the measuring of racing yachts. Professor H. A. Everett of that department who was designated by Professor Peabody for the duty has been officially appointed. Under Professor Peabody, he installed the machinery of the *Froude* and was chief officer of the test runs, having been practically in charge of the experiments during the second year.

Ellen Richards Research Prize

The Naples Table Association for promoting laboratory research by women offers a prize of \$1,000 for the best thesis work by women on scientific subjects embodying new observations and new conclusions based on independent laboratory research in biology, chemical and physical research. The prize has been named the Ellen Richards Research Prize in recognition of the services of Mrs. Richards as chairman of the committee since its appointment in 1900.

NEW ASSOCIATION IN BIRMINGHAM

Flourishing Technology Club formed there January 27—Strong interest shown

Although twenty men were expected at the dinner of the Birmingham Tech men, January 27, only nine showed up. What they lacked in numbers, however, they more than made up in enthusiasm, and the meeting was a splendid success. Those present were Harvey G. Woodward, '88, B. F. Wilson, Jr., '89, E. C. Wells, '92, W. H. Beers, Jr., '05, A. F. Mohen, '06, F. O. Adams, Jr., '07, M. R. Scharff, '09, Phifer Smith, '09, and E. A. Redman, '10. It was a source of great regret that illness prevented the attendance of J. R. O'Hara, Jr., '06, and J. H. White, '09; telephone greetings were received from both, as well as from E. P. Quigley, '88, and J. A. Emery, '93 (visiting Birmingham from New York), who were detained by other engagements.

The pleasure of the evening was enhanced by the reading of cordial greetings that were exchanged with other alumni gatherings. The following message was received from Boston:—

Alumni Council sends greetings to new Tech Association of Greater Birmingham and good wishes for a prosperous and active career.

WALTER HUMPHREYS, *Sec'y.*

And this from Chicago:—

The Northwestern Association congratulates the newcomer, and greets you with a Tech welcome and cheer at our banquet tonight.

RICHARD E. SCHMIDT, *President.*

Another message from Chicago aroused great enthusiasm:—

Hearty good wishes to all Tech men in Alabama. May they flourish individually and form an Association that will bring the spirit of Technology to all that it touches.

MACLAURIN.

These greetings were promptly acknowledged as follows:—

TOASTMASTER,

NORTHWESTERN ALUMNI ASS'N OF M. I. T.,
CHICAGO, ILL.

Tech men of Birmingham thank you for your

greetings and send best wishes to President MacLaurin and to you all.

Notice had previously come that some of the Atlanta men were going to get together, and a message of greeting was therefore sent them.

The greatest surprise of the evening was their reply:—

Nine of us are banqueting at Georgian Terrace. We are with you in spirit. Hope you are having as good a time as we are.

ATLANTA M. I. T. ALUMNI ASSOCIATION.

This announcement of the formation of a new association was most welcome, and the Birmingham men took much pleasure in the thought that the notices of their meeting, sent to Atlanta, may have had some influence in promoting this laudable activity. (The Magic City is always glad to lead Atlanta!)

Letters of greeting were read from I. W. Litchfield, '85, and from Morris Knowles, '91, the latter a frequent visitor to Birmingham. And a letter of regret from Professor W. O. Crosby was read. Professor Crosby is to visit Birmingham in February, and it had been hoped that he might hasten his trip so as to attend the dinner.

Cards exhibiting enthusiastic interest were read from the following, who were unable to attend:—

J. W. Ager, '04, A. W. Allen, '81, A. H. Woodward, '99, G. T. Gambrell, '06, and W. E. Hadley, '04, of Birmingham; J. B. Rapier, '04, of Mobile; Professor H. B. Litchman, '03, and H. W. Griswold, '08, of Tuscaloosa; W. R. Collier, '00, F. W. Hadley, '93, C. A. Smith, '99, W. M. Stearns, '96, H. W. Key, '06, D. C. Picord, '03, and Henrietta C. Dozier, '99, of Atlanta; W. S. Rhodes, '97, of Fort Screven, Ga.; Professor G. P. Shengler, Jr., '06, of Oxford, Ga.; John S. Bleecker, '98, of Columbus, Ga.; H. P. Trevithick, '10, and C. A. Church, '75, of Vicksburg, Miss.; E. G. Goodwin, '03, of Knoxville,

Tenn.; R. W. Balcom, '00, of Nashville, Tenn.; and C. H. Shapleigh, '08, of Tickfaw, La.

One of the pleasantest features of the evening was the reunion of Harvey Woodward and "Tug" Wilson, lightweight champion of Tech in his day, after twenty-three years of separation, and their reminiscences of the old days were the delight of the youngsters present.

Those present were unanimously in favor of the organization of an association broad enough to take in all Tech men of Alabama, Georgia, Mississippi, Tennessee and Florida, who have not the advantage of a local organization, and a committee was appointed (Woodward, Wells, and Scharff) to draft a constitution for the Southeastern Alumni Association of the M. I. T. This will be adopted at an early meeting, at which it is hoped to have the entire Birmingham colony present.

Three song books had been dug up by those present, a piano was dragged in, and Birmingham was initiated into the mysteries of "Take Me Back to Tech," "Dear Old M. I. T.," "On Rogers Steps," "The Stein Song," and many other songs dear to Tech men. And again and again the Magic City was told that "We Are Happy"; finally, with a "Regular M. I. T." which echoed from Red Mountain to Shades, the meeting broke up, after midnight, with pledges of loyal support for the new association and for Tech.

M. R. S.

A Member of the First Class

B. P. Tilden, '68, who was for a number of years an engineer of construction on railroad work in the Northwest, died recently in Bismarck, N. D. From 1881 until about 1900 he was connected with the Northern Pacific Railway in the construction of several lines in North Dakota. In 1902 he went to Florida and spent several years in the construction of a road near Jacksonville. Recently he has been serving as county surveyor of Burleigh County, N. D.

Stability of New York Aqueduct

In order to be fully assured of the safety of the tunnel section of the New York Aqueduct known as the "Siphon" located under the Hudson River at Storm King Mountain near Cornwall, N. Y., three of the most prominent geological experts in the country were secured to make an investigation and report. These were W. O. Crosby, '76, professor emeritus of geology at the Massachusetts Institute of Technology, Professor J. M. Kemp, and Professor Charles E. Berkeley of Columbia University. The tunnel is seventeen feet in diameter and is 1188 feet below the surface. The experts reported that the bore is water tight and that even an earthquake is not likely to damage this deeply buried conduit.

Here for Special Study

Professor Frederick H. Billings of the University of Kansas has come to the Institute for special study in the technique of bacteriology. Professor Billings has the degree of A.B. from Stanford University, A.M. from Harvard and Ph.D. from Munich. He has also taken two summer courses in bacteriology at the Harvard Medical School and one course in dairy bacteriology at the University of Wisconsin. He was professor of botany and bacteriology at the University of Louisiana for six years and was associate professor in the same department at the University of Kansas.

Foreign Students at Tech

The Tech has compiled a table showing the number of foreign students in some of the larger colleges. The figures are as follows:

Name of College.	Number of Students.	Foreign.	Ratio.
University of Pennsylvania.....	3,500	258	1:14
Technology.....	1,500	101	1:15
Columbia.....	5,600	200	1:28
Cornell.....	4,200	137	1:31
Harvard.....	5,000	167	1:30
Yale.....	3,300	90	1:34

Technology Club of New York

On Saturday, March 16, the club will give a luncheon to A. R. McKim, '86, as an expression of the gratitude and affection with which he is regarded, for all he has been and is to the club. The portrait of McKim by Louis Mark, the Austrian court painter, will be formally presented and received by the club on this occasion.

At the annual meeting, February 3, F. C. Schmitz, '95, was chosen governor for five years representing the classes from '94 to '97; R. H. Howes, '03, was re-elected for three years representing the classes of '03 and later; and Ira Abbott, '81, J. A. Emery, '93, G. W. Kittredge, '77, J. Waldo Smith, '87, and N. G. Nims, '90, were chosen for one year representing the membership at large. The lease at 17 Gramercy Park expires in May, 1913, and a special meeting will be called shortly to hear and discuss a report from the building committee. The governors have under advisement a resolution unanimously passed at the annual meeting advocating the provision of more and better club facilities for members not living in the club house. The reports presented at the annual meeting offer evidence of a healthy and encouraging growth in all lines of club activity. The membership increased between January 1, 1911, and January 1, 1912, from 482 to 545. January 1, 1909, there were only 266 members. The increase amounted to 8.6 per cent. in 1910 and to 13.1 per cent. in 1911, while in the latter year the Columbia Club next door showed a gain of only 4 per cent. The restaurant has served on the average about 60 meals a day and the gross income has been over \$10,000. With all items for wages, rent, taxes and laundry the gross cost for the year was about \$2,500 in excess of the income. Over \$4,300 came in from room rent, while the cigar stand yielded a profit of \$330 and the pool tables approximately \$500. Shaffer reports twenty-one class dinners during the year of which his own class, 1910, has one third to its credit. Chamberlain reports about thirty magazines dealing

with science, art and fiction on file in the reading room, and mentions King's Encyclopedia Britannica as the most important of many additions to the library. The February smoker was held on Friday, the 23d, Frank B. Gilbreth the noted efficiency expert speaking on scientific management as applied to building construction. There was a good attendance and lively interest at the December smoker when T. Howard Barnes, '81, spoke on Guatemala and showed a fine series of lantern slides illustrating natural features and engineering enterprises in Central America.

The class of '98 held a luncheon at the club on Saturday, February 17, with nineteen members present. (Boston papers please copy.)

E. H. Blashfield, '69, a member of the club, won the Carnegie prize for the best oil painting at the National Academy of Design exhibition held at 215 West 57th St.

V. Molina, '05, passed several days at the club recently on his way back from Europe to his home in Mexico. H. W. Clement, '89, won the Governor's Prize in the club tournament and G. U. G. Holman, '89, won the First Players' Prize. In the Bridge tournament, the Governor's Prize for the best score was won by T. B. Whittemore, '10.

A Correction

In a recent note upon the work of William R. Copeland, his year was given as 1896, although it should have been 1893. He was in charge of the bacteriological work of the sewage testing station at Lawrence from '93 to '97 instead of having direct charge of the station.

The *Scientific American* of February 10 had an article on "The Model Boat *Froude*" with which the Institute is conducting some highly interesting and valuable experiments. The article is illustrated by a cut which shows part of the hull removed in order to indicate the installation of the propelling and recording machinery.

Enthusiasm at Rochester

The visit of President Maclaurin to Rochester February 2, was the signal for a general turnout of all the alumni in that vicinity to give him a right royal welcome as they always do. He arrived at noon, and in the afternoon made speeches at the University of Rochester and the Mechanics Institute, and also visited the Bausch & Lomb optical plant with a number of alumni, where he was welcomed by the Technology men connected with the works. At luncheon, Doctor Maclaurin was the guest of the young women of the domestic science classes of the Mechanics Institute.

A banquet was held in the evening at the Genesee Valley Club after a strenuous afternoon of inspection and speeches. The President was greeted by a representative gathering of the Technology men of Rochester, all holding responsible positions with the leading business and manufacturing interests of the city. President William E. Hoyt, '68, acted as toastmaster and introduced Doctor Maclaurin in a happy speech. The President told of the needs of the Institute for larger accommodations and of the influences that have brought the Institute to the front chiefly through alumni organization. He described the magnificent site which has recently been secured on the Charles River Bank Esplanade and spoke of the impressive group of buildings which the Institute will build and which will be in keeping with its dignity and reputation. The encouraging words he brought to the club were received with great enthusiasm by his auditors and this was not abated when they understood that the former students of the Institute would be called upon to supply much of the money that would be needed to build the new buildings.

On the day after the banquet, the President visited Kodak Park where he was the guest of the Superintendents' Lunch Club of the plant, at luncheon. A large number of the principal men connected with the company are former students of the Institute.

Professor Jagger in Hawaii

Professor Thomas A. Jagger, Jr., left the Institute early in January for the Hawaiian Islands, having been granted a leave of absence for the remainder of the year in order that he may develop plans for the seismological laboratory at Kilauea. The Technology station is built on the very edge of the crater and has been in charge of Professor Perret as observer during the past summer and fall. The work is being carried on with the co-operation of the United States Government and the Smithsonian Institution and is largely financed by the citizens of Honolulu.

New York Calls Tech Experts

Commissioner Lederle of the Department of Health, New York City, has recently appointed a committee of expert sanitarians and physicians to examine into the methods of the department for the administrative control of typhoid fever. Among the members of the board are Professor William T. Sedgwick, head of the Department of Biology and Public Health, at the Institute, Professor George C. Whipple, '89, of Harvard University, and Professor C.-E. A. Winslow, '98, of the College of the City of New York.

Death of Frederick Greeley

Friends of Frederick Greeley, '76, were shocked to learn of his death which occurred January 23, in Chicago. Mr. Greeley had a warm place in the hearts of every member of the Northwestern Association, but was also well known and loved by hundreds of Tech men in the East. A sketch of his life with a portrait will be published in the April number of the REVIEW.

The demand for REVIEWS for July, 1911, was so great that we now have but four copies left. If any of our readers have any spare copies that they do not need, we shall be under obligation if they will send them to this office.

Tech Dinner at Schenectady

When the Technology Club of Albany, composed of the Tech men of Albany, Troy and Schenectady, was organized, it was proposed to alternate the meetings between Albany and Schenectady. The first meeting having been held in Albany, the second took place in the latter city, February 21. The Mohawk Club was the scene of the reunion and about twenty-eight men were present.

Mr. Albert G. Davis, '93, manager of the patent department of the General Electric Company, presided. He prefaced his introduction of the speakers with amusing reminiscences of his experiences at the Institute and spoke of the recent developments which have made it possible for the Institute to consider a new home in keeping with its reputation and dignity. I. W. Litchfield, '85, in an informal talk, briefly sketched the history of the last seven or eight years of the Institute, tracing the present effective alumni organization back to the Income Fund, and showing how the intimate relations of the alumni with the Corporation and Faculty had brought about the present fortunate state of things. He said that the campaign to secure an alumni fund, which will be the beginning of the very large sum necessary to build the new Institute, would be conducted along the lines of the campaign for State Aid and other alumni activities, so that every former student of the Institute would have a chance to be represented in the gift, and no sum, however modest, would be too small to show the good will of the donor towards his Alma Mater.

Dr. Willis R. Whitney, '90, head of the research department of the General Electric Company, spoke briefly in regard to the new development of the Institute, and the remainder of the evening was spent in questioning the Boston guest in regard to many new features of the Institute and other alumni activities in which the men were particularly interested.

The next meeting of the club will be held in Albany.

Ratio of Students to Teachers

The average number of students to a teacher is 10.5 in our state colleges and universities, according to figures in the government publication, "Statistics of State Universities and Other Institutions of Higher Education Partially Supported by the State." Cornell, the Universities of Wisconsin, Illinois, Michigan, California, and the Massachusetts Institute of Technology have only 9.5+ students to a teacher, which is significant when it is observed that these are the best of our schools.—*Journal of Education*.

Victrola Given to the Union

The Union House Committee has received a gift of a handsome Victor Victrola with fifty records which is used to entertain the students during recreation hours. The donor is Mr. Edgar M. Berliner, '07, superintendent of the Berliner Gramophone Company, Ltd., Montreal, Quebec. It is a handsome gift and is appreciated by all the students.

Fossils Geographically Arranged

Professor Shimer of the department of paleontology is engaged in the rearrangement of a collection of fossils so that the grouping will be geographical, specimens from the same states being found together. This has been found effective not only for the purposes of study, but it is also convenient more especially for the mining students who will find many advantages in this arrangement.

Doctor MacLaurin, just back from three thousand miles of western travel, viewing commercial enterprises and interviewing Technology alumni, finds that some western factory buildings are better arranged and better lighted than are most educational institutions. He has caught a lot of good suggestions for the new Technology on the Charles.—*Boston Herald*.

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Boston, Mass.

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To be admitted to the Institute, the applicant must have attained the age of seventeen years, and must pass examinations in algebra, plane and solid geometry, physics, history of the United States (or ancient history), English, French and German. Preparation in some one of a series of elective subjects is also required. A division of these examinations between different examination periods is allowed. In general, a faithful student who has passed creditably through a good high school, having two years' study of French and German, should be able to pass the Institute examinations.

Graduates of colleges, and in general all applicants presenting certificates representing work done at other colleges, are excused from the usual entrance examinations and from any subjects already satisfactorily completed. Records of the College Entrance Examination Board, which holds examinations at many points throughout the country and in Europe, are also accepted for admission to the Institute.

Instruction is given by means of lectures and recitations, in connection with appropriate work in the laboratory, drawing-room or field. To this end extensive laboratories of chemistry, physics, biology, mining, mechanical engineering, applied mechanics, and the mechanic arts, have been thoroughly equipped, and unusual opportunities for field-work and for the examination of existing structures and industries have been secured. So far as is practicable, instruction is given personally to small sections rather than by lectures to large bodies of students.

The regular courses are of four years' duration, and lead to the degree of Bachelor of Science. In most courses the work may also be distributed over five years by students who prefer to do so. Special students are admitted to work for which they are qualified; and the degrees of Master of Science, Doctor of Philosophy, and Doctor of Engineering are given for resident study subsequent to graduation. Opportunity for research is offered in all the departmental laboratories, in the three recently established Research Laboratories of Applied Chemistry and Physical Chemistry, and in the Sanitary Research Laboratory and Sewage Experiment Station.

The tuition fee, not including breakage in the laboratories, is \$250 a year. In addition, \$30 to \$35 per year is required for books and drawing materials.

For catalogues and information, address

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